

## ABSTRACT OF THE DISCLOSURE

In a sensor unit 1, an antenna section 11 receives a high-frequency signal transmitted from a positioning system for output to a combining circuit 13. Also, in the sensor unit 1, a sensor section 12 detects an angular velocity around one axis, and further detects an acceleration in directions of two axes (that is, X and Y axes). Furthermore, the sensor section 12 uses the detected angular velocity and acceleration to generate a data unit including at least data indicative of the angular velocity and data indicative of the acceleration. The sensor section 12 then performs a digital modulation process with the generated data unit. The combining circuit 13 combines the high-frequency signal output from the antenna section 11 and a digital modulated signal output from the sensor section 12, and then outputs the resultant composite signal to a coaxial cable 3.